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July 21, 2016

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**Re: DOJ No. 90-5-2-1-09611 – Semi-annual Report for January 1, 2016 through June 30, 2016
and ELP Compliance Status Report for July 1, 2015 through June 30, 2016**

To Whom It May Concern:

Honeywell Resins & Chemicals LLC ("Honeywell") is making this submittal pursuant to the Consent Decree in United States of America and Commonwealth of Virginia v. Honeywell Resins & Chemicals LLC ("consent decree"), the reference for which is Civil Action Number: 3:13-cv-00193-REP, and DOJ Case Number: 90-5-2-1-09611.

Paragraph 49 of the consent decree directs Honeywell to submit a semi-annual report with a status of compliance measures identified in Sections V – XIII of the consent decree. Similarly, Paragraph 35 of Appendix A of the consent decree directs Honeywell to submit an annual compliance status report regarding compliance with the enhanced leak detection and repair program ("ELP"). Attachment A contains the semi-annual consent decree report and Attachment B contains the ELP annual compliance status report.

If you have questions or need additional information, please contact me at (804) 541-5119.

Regards,



Phillip C. Sparks
Sr. Environmental Engineer

DOCUMENT CERTIFICATION

Facility Name: Honeywell Resins & Chemicals LLC

Facility Location: 905 East Randolph Road, Hopewell, VA 23860

Type of Submittal Attached: Consent Decree Semi-annual Report for January 1, 2016 through June 30, 2016; and
ELP Compliance Status Report for July 1, 2015
through June 30, 2016


Consent Decree Certification: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

ELP Compliance Status Report Certification: I certify under penalty of law that I have examined and am familiar with the information in the enclosed documents(s), including all attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are, to the best of my knowledge and belief, true and complete. I am aware that there are significant penalties for knowingly submitting false statements and information, including the possibility of fines or imprisonment pursuant to Section 113(c)(3) of the Clean Air Act and 18 U.S.C Sections 1001 and 1341.

Name of Authorized Official: Frederick P. Harry

Title: Site Manager

Signature:



Date: July 21, 2016

Attachment A

Semi-annual Report for January 1, 2016 through June 30, 2016

1. Status of Compliance with Sections V – XIII

Provision	Status
Section V – Area 9 NOx Emission Reductions, Control and Testing	
12. Installation and Operation of first set of NOx Emission Controls (B-Train)	Installation is complete. System is in continuous operation.
13. Installation and Operation of second set of NOx Emission Controls (C-Train)	Installation is complete. System is in continuous operation.
14. Installation and Operation of third set of NOx Emission Controls (A-Train)	Construction began in April 2015 on the A-Train SCR system. The SCR system installation is scheduled to be completed in November 2016 and the commissioning phase will begin. Due by 12/31/2016 (installation), 6/30/2017 (operation).
15. Installation and Operation of fourth set of NOx Emission Controls (E-Train)	Construction on the E-Train SCR system is expected to start in Q1 2017. Due 12/31/2018 (installation), 6/30/2019 (operation).
16. Continuous operation of SCRs, within prescribed limits and methods	For installed NOx Emission Controls (B, C-Trains), the site has operated the systems within the requirements of the consent decree.
17. Conduct initial performance test on SCRs and report results	For installed SCRs (B, C-Trains), the site has conducted and submitted performance results. The initial performance test for the A-Train SCR system will be completed within 180 days of the date the SCR system commences operation.
Section VI – Area 9 CEMS Installation and Operation	
18. Replace the existing EMCAMS with the installation / operation of NOx CEMs as installed	The site has replaced EMCAMS where it has installed CEMS (B, C-Trains). The A-Train EMCAMS will be replaced with CEMs as part of the SCR installation project.
19. Install, certify, calibrate, maintain and operate NOx CEMs for B-Train	Installation is complete. System is in continuous operation.
19. Install, certify, calibrate, maintain and operate NOx CEMs for C-Train	Installation is complete. System is in continuous operation.
19. Install, certify, calibrate, maintain and operate NOx CEMs for A-Train	The A-Train NOx CEMs have been purchased and delivered. The A-Train CEMs will be installed and commissioned by 6/30/2017.
19. Install, certify, calibrate, maintain and operate NOx CEMs for E-Train	The E-Train NOx CEMs will be installed as part of the E-Train SCR project and will be installed and commissioned by 6/30/2019.
20. Conduct Relative Accuracy Test Audits (RATAs) and Compressed Gas Audits (CGAs)	For the installed NOx CEMS, the site has conducted and submitted RATAs and quarterly CGAs.

Section VII – Area 9 PM and Opacity Testing and Monitoring	
21. Conduct particulate matter and opacity performance testing and submit testing report	PM and opacity testing has been completed on the A, B, C, D and E- Trains and the results submitted.
Section VIII – Enhanced Leak Detection and Repair	
22. Implement and comply with the enhanced leak detection and repair plan (ELP)	The site has implemented the enhanced leak detection and repair plan. The ELP compliance status report is provided in Attachment B of this submittal.
Section IX – Benzene Waste NESHAP Audit	
23. Complete consent decree measures for BWON audit	The site has completed the BWON audit requirements of Section IX.
24. Submit audit statement of work	Statement of work was submitted and approved.
25. Enter into contract with third party to conduct BWON audit	Under a contract established with Sage Environmental Consulting, the site had the BWON audit completed.
26. Submit third party audit report	The site submitted the BWON audit report to the VADEQ and EPA.
27. Actions if site's TAB is over 10 Mg/yr	The BWON audit determined the site's TAB to be well less than 10 Mg/yr.
Section X – Miscellaneous Operations and Maintenance Measures	
28. Submit control and monitoring device preventative maintenance and operations plan, review it annually and update as needed.	Plan was submitted and approved in 2013, and last updated in December 2015.
29. Air pollution control practices	Site is implementing good air pollution control practices per the consent decree.
30. Tracking periods of non-operation	Site is keeping written records of startups, shutdowns, malfunctions, non-operation, bypasses per the consent decree.
Section XI – Permits	
31. Incorporate consent decree into new source review and Title V permits	An NSR permit has been issued to the site to incorporate the requirements of this consent decree. The Virginia Department of Environmental Quality reissued the Title V permit in October 2014, incorporating the requirements of the consent decree.
32. Obtain required permits	The site obtained a new source review permit requiring the installation of SCRs on A, B, C, and E Trains. The site also received its new Title V Permit in October 2014.
Section XII – Prohibition of Netting Credits or Offsets from Required Controls	
33. Summary	The site is compliant with the general netting prohibition provisions of the consent decree.
34. General netting prohibition	
35. Exception to general netting prohibition	
36. Outside the scope of the general netting prohibition	

Section XIII – Environmental Mitigation	
37. Operate only Tier III (or equivalent) diesel switcher locomotives	The site is operating only Tier III diesel switcher locomotives.
38. Offset credit prohibition	The site has not sought to obtain netting credits for the purchase and use of the Tier III locomotives.
39. Certification	The site submitted the diesel switcher certification required by the consent decree.

2. Description of Problems Encountered or Anticipated

The site has not encountered or anticipated any problems meeting the requirements of the consent decree.

3. Status of Permit Applications or Modifications

See above description in Section 31.

4. Description of Changes Not Authorized by Permit or Regulation

None

5. Description of Non-compliance with Consent Decree

Potential violations of Enhanced LDAR Program requirements in Appendix A of the consent decree are discussed in Attachment B. Otherwise, a review of documents and records associated with the consent decree did not indicate any potential violations.

Attachment B

Enhanced LDAR Program (ELP) Compliance Status Report

Period: July 1, 2015 through June 30, 2016

1. Personnel assigned to LDAR functions

The site had the following personnel assigned to LDAR functions during this reporting period, including the estimated percentage of time each job position was dedicated to performing the LDAR functions:

Job Description	Number of Employees	LDAR Functions Performed	% of Time	Notes
LDAR Program Coordinator	1	<ul style="list-style-type: none"> - Program Oversight - Reporting - Audits - Training - Tracking changes - Approving Certified Low Leak Technology (CLLT) valves and valve packing 	40	From July 2015 to June 2016, Honeywell assigned a member of the environmental staff to oversee the whole LDAR program.
LDAR Contractor	3	<ul style="list-style-type: none"> - Maintaining LDAR Instruments - Method 21 monitoring and scheduling - Component tagging - Database management - Tracking changes - Tracking repairs / replacements 	100	The site has an arrangement for three individuals provided by an LDAR contractor to be responsible for managing the monitoring program.
Area Maintenance Coordinator	5 (1 for each LDAR applicable production area)	<ul style="list-style-type: none"> - Coordinating leak repairs with maintenance - Coordinating LDAR equipment improvement and/or replacement with maintenance 	~ 5	The amount of time dedicated to LDAR leak repairs and equipment replacement/improvement depends on the number of components in the applicable production area and the leak history. Area 6 requires the most time dedicated to the LDAR program for the coordinators, planners and engineers since it contains the most components.
Area Maintenance Planner	4 (1 for each LDAR applicable production area, 2 areas share a planner)	<ul style="list-style-type: none"> - Scheduling LDAR equipment repairs, including delay of repair (DOR) components - Scheduling LDAR equipment replacements and/or improvements - Managing new LDAR component installations associated with work orders 	~ 5	
Area Production Engineer	5 (1 for each LDAR applicable production area)	<ul style="list-style-type: none"> - Managing LDAR related process changes - Assisting with LDAR repairs/replacements/improvements as needed - Managing DOR and delay of improvement (DOI) documentation 	~ 5	

2. Non-compliance with the requirements of Appendix A

Enhanced LDAR Program – Valve Improvement Program (Appendix A, Paragraph 19)

During the second half of 2015, Honeywell completed its investigation to identify potential maintenance and capital projects where CLLT valves were involved. The investigation included the following tasks:

- Reviewing over 1,800 work orders completed for both routine maintenance and outage work;
- Reviewing the maintenance outage task lists in each LDAR area to ensure that the work order review comprehensively addressed all maintenance and outages;
- Conducting a detailed review of 12 capital projects implemented in LDAR areas;
- Conducting a detailed review of 25 piping and instrumentation diagrams associated with capital project changes;
- Interviewing capital project managers to ensure that the capital project review was comprehensive;
- Interviewing a total of 9 operations and maintenance personnel in the LDAR operating areas to ensure that no tasks were omitted from the investigation detailed above.

From that investigation, 56 valves were identified that either did not contain CLLT, or the CLLT status could not be confirmed. After completing the investigation, Honeywell submitted a summary report to EPA on September 11, 2015 detailing the results of the investigation and the corrective and preventative actions taken.

Additionally, Honeywell presented these findings to EPA and DEQ in a meeting at the EPA Region 3 offices on October 7, 2015 and included these findings in the consent decree semi-annual status of compliance report submitted to EPA and DEQ on January 29, 2016.

Of the total of 56 valves disclosed in the second half of 2015:

- All valves were monitored and no leaks were found,
- 7 valves were upgraded to CLLT while the process was operating (shutdown not required),
- 41 valves were torqued to confirm they meet CLLT (shutdown not required), and
- 8 valves were upgraded to CLLT during process unit shutdowns.

All 56 valves were restored to CLLT by November 3, 2015.

The preventative measures Honeywell has taken as the result of these findings include:

- Reviewed LDAR valve needs and obtained the CLLT documentation for valve replacements,
- Developed an approved CLLT valve list,
- Enhanced the storeroom inventory of CLLT valves and suppliers stock of CLLT valves,
- Required new CLLT valves to have CLLT tags affixed to the valve,
- Conducted training (maintenance, operations, project, LDAR contractor and procurement), and
- Upgraded valve data in LeakDAS to ensure we have a suitable replacement for the 4,200 valves currently in service.

Enhanced LDAR Program – Management of Change (Appendix A, Paragraph 24)

A capital project was implemented to replace condenser 96 in Area 6. Four valves associated with this capital project were not tagged in the field or included in the LDAR monitoring program. These

component tags have been added into the database and monitored components. None were found to be leaking.

This capital project was managed under the facility management of change (MOC) process. Both the request for change documentation and the pre-startup review expressly identified the project as applicable to the LDAR program. Nonetheless, four of the valves in this project were not field tagged and monitored.

Honeywell has performed a detailed review of the MOC process to understand why the valves were not tagged and how to ensure that all valves are tagged in the future. Based on this review, we have determined additional tracking is needed to identify the specific LDAR tasks required for each change and to track these tasks through completion. Honeywell has modified the LDAR MOC procedure to incorporate this additional review into the initial change assessment and in the pre-startup review to provide additional detail.

Honeywell submitted a disclosure of potential consent decree violations for this audit finding on September 3, 2015. Additionally, Honeywell presented this finding and corrective actions to EPA and DEQ in a meeting at the EPA Region 3 offices on October 7, 2015 and included these findings in the consent decree semi-annual status of compliance report submitted to EPA and DEQ on January 29, 2016.

Enhanced LDAR Program – Valve Monitoring Frequency (Appendix A, Paragraph 4)

During the 3rd quarter internal LDAR audit, two (2) valves were identified that were not being monitored at the required frequency. The database records for these two (2) valves indicate a change in April of 2014 to classify them as insulated and exempt from monitoring. The software had not scheduled these valves for monitoring after this change. A physical inspection of these valves revealed the valve leak interfaces are accessible for monitoring. Both valves have since been monitored and are not leaking. The database has been corrected to show these valves are not exempt from monitoring and they are now being scheduled for quarterly monitoring.

Honeywell submitted a disclosure of potential consent decree violations for this audit finding on October 5, 2015. Additionally, Honeywell presented this finding and corrective actions to EPA and DEQ in a meeting at the EPA Region 3 offices on October 7, 2015 and included these findings in the consent decree semi-annual status of compliance report submitted to EPA and DEQ on January 29, 2016.

3. Problems encountered in complying with the requirements of Appendix A

The site has not encountered or anticipated any problems meeting the requirements of Appendix A of this consent decree.

4. Information required in Appendix A, Paragraph 20

The site knows of no valve for which it could not identify an acceptable CLLT valve or CLLT valve packing.

5. Description of LDAR training in accordance with Appendix A, Part I of this Consent Decree

Training Site Employees

The site has established a training protocol for employees involved in LDAR repairs and other LDAR duties. This training is provided once per calendar year as a refresher and to new employees that have site LDAR responsibilities. This protocol was last updated in the first quarter of 2016. The following LDAR training was provided to site employees during the reporting period:

- Maintenance pipefitters assigned to LDAR areas (August 2015),
- LDAR employees in the Specialty Chemicals operating area (September 2015),
- LDAR contractor employees (October 2015)
- LDAR Employees in Area 6 (March 2016),
- LDAR Employees in Area 8/16 (March 2016),
- Open Ended Line (OEL) control for all employees in LDAR operating areas (March 2016)
- Employees with plant wide LDAR responsibilities (May 2016), and

Training Contractors

The site has a contractor responsible for managing the monitoring program including monitoring instruments, schedule, documenting changes, and records management. The contractor has its own training program to make sure its employees are competent to execute their duties. The site reviews the contractor training records to make sure the program is executed appropriately.

6. Deviations identified and corrective actions taken from the QA/QC performed under Appendix A, Part J

Quarterly Audits were performed per Appendix A, Paragraph 27. The potential consent decree violations identified during these audits were reported in the 10-day notifications submitted on July 20, 2015; September 3, 2015; and October 5, 2015; and are included in Section 2 of this attachment. Additionally, Honeywell included these findings in the consent decree semi-annual status of compliance report submitted to EPA and DEQ on January 29, 2016.

Deviations identified during the quarterly audits and not described in Section 2 of this Attachment are summarized in the following table.

	Audit	Deviation	Corrective Action	Status
1.	Q1 2016	Three Open-Ended Lines (OELs) were found.	Operations/Maintenance was notified immediately of the existence of the OELs. All three OELs were promptly corrected and Method 21 readings obtained and found to be below the leak definition.	Complete
2.	Q2 2016	Three Open-Ended Lines (OELs) were found.	Operations/Maintenance was notified immediately of the existence of the OELs. All three OELs were promptly corrected and Method 21 readings obtained and found to be below the leak definition.	Complete

7. Summary of LDAR audit results / deficiencies

Sage Environmental Consulting, LP ("Sage") conducted the field portion of the third party LDAR audit between December 7, 2015 and December 11, 2015 and the off-site database review. The audit followed the requirements of Appendix A, Part K. The final audit report was submitted to Honeywell on January 26, 2016. Honeywell submitted the Third Party LDAR Audit Final Report, including the deficiencies found, and the corrective action plan (CAP) for those deficiencies in the May 20, 2016 letter sent to D. Abraham and K. Hall of EPA Region III, entitled "DOJ No. 90-5-2-1-09611 – Corrective Action Plan for Enhanced LDAR Plan Audit". Please refer to this letter for detailed information on the third party LDAR audit.

The following is a summary of the third party LDAR audit findings and associated corrective actions:

Finding	Corrective Action(s)	Status
1. <u>Overlooked Components</u> – Six (6) untagged valves in hydrocarbon service were identified as missing from the LDAR program.	<ul style="list-style-type: none"> - Inventory one (1) untagged valve identified in Specialty Chemicals (SCA) and five (5) untagged valves identified in Area 14. - Re-train the LDAR monitoring technicians on component inventory field auditing. 	Complete
2. <u>Open Ended Lines (OELs)</u> – Twenty-three (23) open-ended lines (19 heavy liquid and 4 light liquid) without control by cap, plug, blind flange or double-blocked valve were identified.	<ul style="list-style-type: none"> - Correct the OELs and conduct Method 21 monitoring of the four (4) light liquid OELs to confirm they are not leaking. - Re-training employees in the LDAR covered processes specifically on the OEL requirements. - Implement a procedure to conduct quarterly OEL inspections for heavy liquid pump stations. - Complete annual OEL visual inspections for LL/GV service during Q1 2016. 	Complete
3. <u>Leak Ratio > 3.0</u> – The comparative monitoring of valves and pumps in Unit SCA resulted in leak ratios >3.0.	<ul style="list-style-type: none"> - Re-train monitoring technicians in LDAR monitoring techniques for valves and pumps. - Implement a procedure for the LDAR contractor to conduct monthly observations of the Method 21 monitoring technique of the LDAR technicians. - Implement a procedure for reviewing and, if needed, following up on EPA Method 21 readings which may be between 100 ppm and 250 ppm. 	Complete
4. <u>Difficult-to-Monitor (DTM) Justification</u> – A field review of twelve (12) DTM components found one (1) to be incorrectly classified as DTM.	<ul style="list-style-type: none"> - The DTM component in question was verified in the field and was located 14 feet above the support surface. This confirms the monitoring technician must be raised greater than two (2) meters to monitor the component. Therefore, the component was correctly identified as a DTM in the past and no change is needed. 	No Action Required
5. <u>DTM Justification</u> – A database review indicates two (2) valves are missing the DTM justification.	<ul style="list-style-type: none"> - Confirmed that the DTM classification is correct. The LeakDAS database records were updated to include the justification that the technician is required to be raised more than two (2) meters above a support surface in order to conduct the monitoring. 	Complete
6. <u>Missed Inspections</u> – A database review indicates forty-eight (48) valves missed one or more required monthly/quarterly inspections because they were incorrectly categorized as OELs and/or connectors.	<ul style="list-style-type: none"> - This audit finding was the result of previous corrections made to the database. The correct monthly/quarterly monitoring frequencies were initiated after correctly identifying these components as valves (as opposed to OELs or connectors). No additional corrective actions are needed to address this audit finding. 	Complete
7. <u>Unhighlighted P&ID Components</u> – P&ID reviews indicate ten (10) unhighlighted valves which were found to be missing from the LDAR monitoring program.	<ul style="list-style-type: none"> - The four (4) valves identified in Specialty Chemicals (SCA) are not in LDAR service. Therefore, no action was required. - The drawings were determined to be in error for the (6) valves identified in Area 14. These valves were not physically located in the field. The drawings were noted of these errors for correction. 	No Action Required

The next third party LDAR audit will be scheduled for the fourth Quarter of 2017.

8. Status of CAP pursuant to Part K of Appendix A during the reporting period

Upon receipt of the Third Party LDAR Audit Final Report from Sage on January 26, 2016, Honeywell prepared the initial CAP on February 11, 2016 to address the audit findings. All of the corrective actions contained in the CAP were completed by April 22, 2016. The CAP was submitted on May 20, 2016 in the letter sent to D. Abraham and K. Hall of EPA Region III, entitled "DOJ No. 90-5-2-1-09611 – Corrective Action Plan for Enhanced LDAR Plan Audit." At the time of the submittal of this report, Honeywell has not received any correspondence from EPA regarding the approval/disapproval of all or parts of the CAP; therefore, no further action is currently required under the CAP.

9. Equipment Replacement/Improvement Report pursuant to Part G, Paragraph 23. of Appendix A, including: i. Actions taken to comply with the Equipment Replacement and Improvement Program, including identifying each piece of equipment that was replaced or upgraded, and ii. Schedule for future replacements or upgrades

Repeat >250 ppm Screening Values (Valves and Connectors)

During the reporting period, the following existing valves and connectors in covered process units had either: 1) valves with screening values at or above 250 ppm during any two monitoring events during a rolling 12-month period, or 2) connectors with screening values at or above 250 ppm during any two out of three consecutive monitoring periods, thus requiring replacement/improvement.

Date of Triggering Event	LDAR Tag Number	Covered Equipment Type	Covered Process Unit	Process Unit Shutdown Required?	Replacement/Improvement Complete Date
3/25/2015	ONE-1 3381	Valve	Area 6	Yes	8/17/2015
5/15/2015	ONE-1 5337	Valve	Area 6	Yes	9/28/2015
6/1/2015	ONE-1 1489	Valve	Area 6	Yes	9/28/2015
6/1/2015	ONE-1 1490	Valve	Area 6	Yes	9/28/2015
6/3/2015	ONE-1 273	Valve	Area 6	Yes	9/28/2015
6/3/2015	ONE-1 3542	Valve	Area 6	Yes	9/28/2015
6/5/2015	ONE-1 355	Valve	Area 6	Yes	9/28/2015
6/5/2015	ONE-1 400	Valve	Area 6	Yes	9/28/2015
6/5/2015	ONE-1 388.1	Connector	Area 6	Yes	9/28/2015
6/10/2015	ONE-1 2374	Valve	Area 6	Yes	7/13/2015
6/10/2015	ONE-1 1168	Valve	Area 6	Yes	9/28/2015
6/15/2015	ONE-1 2159	Valve	Area 6	Yes	7/9/2015
7/15/2015	ONE-1 60	Valve	Area 6	Yes	9/28/2015
7/16/2015	ONE-1 2325	Valve	Area 6	No	8/13/2015
7/17/2015	ONE-1 3680	Valve	Area 6	Yes	9/28/2015
8/5/2015	LAC-1 109	Valve	Area 8/16	Yes	9/28/2015
9/2/2015	ONE-1 2077	Valve	Area 6	No	9/3/2015
12/3/2015	ONE-1 752	Valve	Area 6	Yes	5/5/2016
12/8/2015	MPO-1 471	Valve	Spec Chem	No	1/6/2016
2/2/2016	ONE-1 6110.8	Connector	Area 6	No	2/9/2016
3/2/2016	ONE-1 1319	Valve	Area 6	No	3/17/2016
3/22/2016	ONE-1 5872	Valve	Area 6	Yes	Fall 2016
4/14/2016	ONE-1 2453	Valve	Area 6	No	5/12/2016
6/14/2016	ONE-1 1172	Valve	Area 6	Yes	Fall 2016

Six (6) of these components were replaced/improved within 30 days after the triggering monitoring event, and Sixteen (16) required a process unit shutdown to complete the replacement/improvement.

There were two (2) valves at the end of the reporting period that require a process unit shutdown to replace/improve the valve. These 2 valves are scheduled to be replaced/improved during the scheduled maintenance outage in the fall of 2016, unless an earlier opportunity becomes available.

Repeat 100 ppm to 250 ppm Screening Values (Valves)

During the reporting period, the following existing valves in covered process units had screening values between 100 ppm and 250 ppm during any two monitoring events during a rolling 12-month period, requiring replacement/improvement during a process unit shutdown.

LDAR Tag Number	Covered Process Unit	Replacement/Improvement Complete Date
ONE-1 2372	Area 6	7/13/2015
ONE-1 2368	Area 6	7/13/2015
ONE-1 2373	Area 6	7/13/2015
ONE-1 3843	Area 6	7/28/2015
ONE-1 1460	Area 6	9/15/2015
ONE-1 1445	Area 6	9/15/2015
ONE-1 4874	Area 6	9/21/2015
ONE-1 3374	Area 6	9/28/2015
ONE-1 543	Area 6	9/28/2015
ONE-1 4327	Area 6	9/28/2015
ONE-1 386	Area 6	9/28/2015
ONE-1 4766	Area 6	9/28/2015
ONE-1 4464	Area 6	9/28/2015
ONE-1 2221	Area 6	9/28/2015
ONE-1 4323	Area 6	9/28/2015
ONE-1 4958	Area 6	9/28/2015
ONE-1 5011	Area 6	9/28/2015
ONE-1 5591	Area 6	9/28/2015
ONE-1 1368	Area 6	9/28/2015
ONE-1 2442	Area 6	9/28/2015
ONE-1 618	Area 6	9/28/2015
ONE-1 104	Area 6	9/28/2015
ONE-1 5343	Area 6	9/28/2015
ONE-1 5010	Area 6	9/28/2015
ONE-1 3049	Area 6	9/28/2015
ONE-1 1743	Area 6	9/28/2015
ONE-1 2451	Area 6	9/28/2015
ONE-1 2753	Area 6	9/28/2015
ONE-1 5585	Area 6	9/28/2015
ONE-1 1458	Area 6	9/28/2015
ONE-1 1495	Area 6	9/28/2015
ONE-1 925	Area 6	9/28/2015
ONE-1 3443	Area 6	9/28/2015
ONE-1 3477	Area 6	9/28/2015

LDAR Tag Number	Covered Process Unit	Replacement/Improvement Complete Date
ONE-1 5697	Area 6	9/28/2015
ONE-1 2242	Area 6	9/28/2015
ONE-1 773	Area 6	Fall 2016
ONE-1 1189	Area 6	Fall 2016
ONE-1 2243	Area 6	Fall 2016
ONE-1 2406	Area 6	Fall 2016
ONE-1 1180	Area 6	Fall 2016
ONE-1 1314	Area 6	Fall 2016
ONE-1 5283	Area 6	Fall 2016

The majority of these valves were replaced during the 2015 fall maintenance outage. Whenever possible, valves that could be isolated during normal operations were replaced/improved prior to the maintenance outage to minimize the amount of work performed during the turnaround.

There were seven (7) valves at the end of the reporting period that meet the requirements for replacement/improvement during the next process unit shutdown. These 7 valves are scheduled to be replaced/improved during the scheduled maintenance outage in the fall of 2016, unless an earlier opportunity becomes available.

New Valves

During the reporting period, 137 CLLT valves were added as either new components or replacements for existing components.